

MAILING CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202 on June 26, 2002.

Date

JUL 02 2002

Signature

Print Name

#3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Nelson et al.

Filing Date: January 11, 2002

Serial No.: 10/044,070

For: PREVENTION OF CELL MIGRATION INITIATION WITH CMV US28 RECEPTOR
ANTAGONISTS

Docket: 48892-1

Date: June 26, 2002

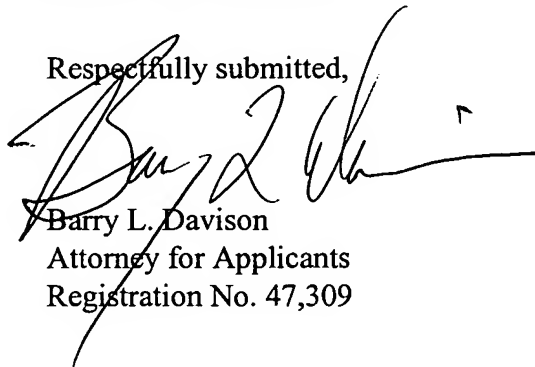
Assistant Commissioner for Patents
Washington, DC 20231

STATEMENT UNDER 37 C.F.R. §1.821

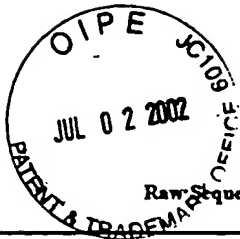
Sir:

I hereby state that the content of the paper and computer-readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. §1.821, are the same.

Respectfully submitted,


Barry L. Davison
Attorney for Applicants
Registration No. 47,309

Davis Wright Tremaine LLP
2600 Century Square
1501 Fourth Avenue
Seattle, WA 98101-1688
Tel: 206-628-7621
Fax: 206-628-7699



Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/044,070

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence.
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,070

DATE: 01/30/2002

TIME: 15:47:35

Input Set : A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

Does Not Comply
Corrected Diskette Needed

1 <110> APPLICANT: Nelson, Jay
2 Streblow, Daniel
3 Soderberg-Naucler, Cecilia
4 Smith, Patricia
5 Ruchti, Fronziska

7 <120> TITLE OF INVENTION: Prevention of Cell Migration Initiation with CMV US28

Receptor Antagonists

9 <130> FILE REFERENCE: 48892-1

11 <140> CURRENT APPLICATION NUMBER: US/10/044,070

13 <141> CURRENT FILING DATE: 2002-01-11

13 <150> PRIOR APPLICATION NUMBER: US 09/387,044

15 <151> PRIOR FILING DATE: 1999-08-31

17 <150> PRIOR APPLICATION NUMBER: US 60/098,689

19 <151> PRIOR FILING DATE: 1998-08-31

21 <160> NUMBER OF SEQ ID NOS: 28

23 <170> SOFTWARE: Word

25 <210> SEQ ID NO: 1

27 <211> LENGTH: 1087

29 <212> TYPE: DNA

31 <213> ORGANISM: artificial sequence

33 <220> FEATURE:

W--> 35 <223> OTHER INFORMATION:

35 <400> SEQUENCE: 1

37 aaacgtcatc tcgccgacgt ggtgaaccgc tcatatagac caaacccggac 50
39 gctgcctcag tctctcggtg cgtggaccag acggcgtcca tgcaccgagg 100
41 gcagaactgg tgctatcatg acaccgacga cgacgaccgc ggaactcaag 150
43 acggagtgtg actacgatga agacgcgact ccttgtgttt tcaccgacgt 200
45 gcttaatcag tcaaagccag ttacgttgtt tctgtacggc gttgtctttc 250
47 tcttcggttc catcggaac ttcttggtga tcttcacat cacttgccga 300
49 cgtcggattc aatgctccgg cgatgtttac ttatcaacc tcgcgccgc 350
51 cgatttgctt ttcgtttgta cactacctct gtggatgcaa tacctcctag 400
53 atcacaaactc cctagccagc gtgccgtgta cgttactcac tgccgtttc 450
55 tacgtggcta tgtttgccag ttgtgtttt atcacggaga ttgactcga 500
57 tcgctactac gctattgttt acatgagata tcggcctgta aaacaggcct 550
59 gccttttcag tatttttttg tggatctttg ccgtgatcat cgcattcca 600
61 cactttatgg tggtgaccaa aaaagacaat caatgtatga ccgactacga 650
63 ctacttagag gtcagttacc cgatcatcct caacgtagaa ctcagtctt 700
65 gtgctttcgt gatcccgctc agtggtatca gctactgcta ctaccgcatt 750
67 tcagaatcg ttgcgggtgtc tcagtcgcgc cacaagggtc gcattgtacg 800
69 ggtacttata gcggtcgtgc ttgtotttat catcttttg ctgccgtacc 850
71 acctaacgct gtttgtggac acgttaaaac tcctcaaatg gatctccagc 900
73 agctgcgagt tcgaaagatc gctcaaacgt gcgctcatct tgaccgagtc 950
75 gctcgccttt tgtcactggt gtctcaatcc gctgctgtac gtcttcgttg 1000
77 gcaccaagtt tcggcaagaa ctacactgtc tgctggccga gtttcgccag 1050

see item 11 on Error Summary Sheet

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,070

DATE: 01/30/2002

TIME: 15:47:35

Input Set : A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

79 cgactctttt cccgcgatgt atcctggtac cacagca 1087
81 <210> SEQ ID NO: 2
83 <211> LENGTH: 21
85 <212> TYPE: DNA
87 <213> ORGANISM: artificial sequence
89 <220> FEATURE:
91 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
93 <400> SEQUENCE: 2
95 cggaattagt cagtttcggt c 21
97 <210> SEQ ID NO: 3
99 <211> LENGTH: 20
101 <212> TYPE: DNA
103 <213> ORGANISM: artificial sequence
105 <220> FEATURE:
107 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
109 <400> SEQUENCE: 3
111 cgtcttgacc acgatagtag 20
113 <210> SEQ ID NO: 4
115 <211> LENGTH: 20
117 <212> TYPE: DNA
119 <213> ORGANISM: artificial sequence
121 <220> FEATURE:
123 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
125 <400> SEQUENCE: 4
127 gcagcctaag ttacgaggcc 20
129 <210> SEQ ID NO: 5
131 <211> LENGTH: 20
133 <212> TYPE: DNA
135 <213> ORGANISM: artificial sequence
137 <220> FEATURE:
139 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
141 <400> SEQUENCE: 5
143 tagtggttgag ggatcggtcg 20
145 <210> SEQ ID NO: 6
147 <211> LENGTH: 20
149 <212> TYPE: DNA
151 <213> ORGANISM: artificial sequence
153 <220> FEATURE:
155 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
157 <400> SEQUENCE: 6
159 cgaattagtc agtttcggtc 20
161 <210> SEQ ID NO: 7
163 <211> LENGTH: 20
165 <212> TYPE: DNA
167 <213> ORGANISM: artificial sequence
169 <220> FEATURE:
171 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
173 <400> SEQUENCE: 7
175 agcgatgatg cgataacaaa 20

RAW SEQUENCE LISTING

DATE: 01/30/2002

PATENT APPLICATION: US/10/044,070

TIME: 15:47:35

Input Set: A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

177 <210> SEQ ID NO: 8
179 <211> LENGTH: 20
181 <212> TYPE: DNA
183 <213> ORGANISM: artificial sequence
185 <220> FEATURE:
187 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
189 <400> SEQUENCE: 8
191 gtcaaatacc accactggtt 20
193 <210> SEQ ID NO: 9
195 <211> LENGTH: 18
197 <212> TYPE: DNA
199 <213> ORGANISM: artificial sequence
201 <220> FEATURE:
203 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
205 <400> SEQUENCE: 9
207 atttgtagag gtggtcat 18
209 <210> SEQ ID NO: 10
211 <211> LENGTH: 18
213 <212> TYPE: DNA
215 <213> ORGANISM: artificial sequence
217 <220> FEATURE:
219 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
221 <400> SEQUENCE: 10
223 gctcacctgc gttaaggt 18
225 <210> SEQ ID NO: 11
227 <211> LENGTH: 18
229 <212> TYPE: DNA
231 <213> ORGANISM: artificial sequence
233 <220> FEATURE:
235 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
237 <400> SEQUENCE: 11
239 gtgctgttta aggtgtgg 18
241 <210> SEQ ID NO: 12
243 <211> LENGTH: 18
245 <212> TYPE: DNA
247 <213> ORGANISM: artificial sequence
249 <220> FEATURE:
251 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
253 <400> SEQUENCE: 12
255 agtgtactcg aacaactg 18
257 <210> SEQ ID NO: 13
259 <211> LENGTH: 18
261 <212> TYPE: DNA
263 <213> ORGANISM: artificial sequence
265 <220> FEATURE:
267 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
269 <400> SEQUENCE: 13
271 caaccatacc ccgttggc 18
273 <210> SEQ ID NO: 14

RAW SEQUENCE LISTING

DATE: 01/30/2002

PATENT APPLICATION: US/10/044,070

TIME: 15:47:36

Input Set: A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

275 <211> LENGTH: 18
277 <212> TYPE: DNA
279 <213> ORGANISM: artificial sequence
281 <220> FEATURE:
283 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
285 <400> SEQUENCE: 14
287 ttcacgcagc aacaggcg 18
289 <210> SEQ ID NO: 15
291 <211> LENGTH: 18
293 <212> TYPE: DNA
295 <213> ORGANISM: artificial sequence
297 <220> FEATURE:
299 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
301 <400> SEQUENCE: 15
303 cctggtaagg tatatcct 18
305 <210> SEQ ID NO: 16
307 <211> LENGTH: 18
309 <212> TYPE: DNA
311 <213> ORGANISM: artificial sequence
313 <220> FEATURE:
315 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
317 <400> SEQUENCE: 16
319 gtagctcaat atcaatgt 18
321 <210> SEQ ID NO: 17
323 <211> LENGTH: 18
325 <212> TYPE: DNA
327 <213> ORGANISM: artificial sequence
329 <220> FEATURE:
331 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
333 <400> SEQUENCE: 17
335 gcccttcttt gtatgtcc 18
337 <210> SEQ ID NO: 18
339 <211> LENGTH: 18
341 <212> TYPE: DNA
343 <213> ORGANISM: artificial sequence
345 <220> FEATURE:
347 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
349 <400> SEQUENCE: 18
351 atgggtacgt ttggtgtg 18
353 <210> SEQ ID NO: 19
355 <211> LENGTH: 18
357 <212> TYPE: DNA
359 <213> ORGANISM: artificial sequence
361 <220> FEATURE:
363 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
365 <400> SEQUENCE: 19
367 cgtcgtcgtc ggtgtcat 18
369 <210> SEQ ID NO: 20
371 <211> LENGTH: 18

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,070

DATE: 01/30/2002

TIME: 15:47:36

Input Set : A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

373 <212> TYPE: DNA
375 <213> ORGANISM: artificial sequence
377 <220> FEATURE:
379 <223> OTHER INFORMATION: US27 receptor-specific antisense oligonucleotide
381 <400> SEQUENCE: 20
383 cgtcgtgagt tccgcggt 18
385 <210> SEQ ID NO: 21
387 <211> LENGTH: 18
389 <212> TYPE: DNA
391 <213> ORGANISM: artificial sequence
393 <220> FEATURE:
395 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
397 <400> SEQUENCE: 21
399 cagggagtcg cttcatcg 18
401 <210> SEQ ID NO: 22
403 <211> LENGTH: 18
405 <212> TYPE: DNA
407 <213> ORGANISM: artificial sequence
409 <220> FEATURE:
411 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
413 <400> SEQUENCE: 22
415 tgattaagca cgtcgggtg 18
417 <210> SEQ ID NO: 23
419 <211> LENGTH: 18
421 <212> TYPE: DNA
423 <213> ORGANISM: artificial sequence
425 <220> FEATURE:
427 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
429 <400> SEQUENCE: 23
431 gaagagaaag acaacgcc 18
433 <210> SEQ ID NO: 24
435 <211> LENGTH: 18
437 <212> TYPE: DNA
439 <213> ORGANISM: artificial sequence
441 <220> FEATURE:
443 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
445 <400> SEQUENCE: 24
447 gctgtggtac caggatac 18
449 <210> SEQ ID NO: 25
451 <211> LENGTH: 18
453 <212> TYPE: DNA
455 <213> ORGANISM: artificial sequence
457 <220> FEATURE:
459 <223> OTHER INFORMATION: US28 receptor-specific antisense oligonucleotide
461 <400> SEQUENCE: 25
463 ctccgacgcg aaaagctc 18
465 <210> SEQ ID NO: 26
467 <211> LENGTH: 18
469 <212> TYPE: DNA

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/044,070

DATE: 01/30/2002

TIME: 15:47:37

Input Set : A:\CONTSEQ.txt

Output Set: N:\CRF3\01302002\J044070.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:35 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: